

ABSTRACT

A refrigeration system includes a first cooling system having a refrigerant in thermal communication with a heat exchanger device to provide a first cooling source. A second cooling system has a coolant in thermal communication with the heat exchanger device and a refrigeration device is configured to receive the coolant. A third cooling system is configured to provide a second cooling source to the coolant when the first cooling source is unavailable, so that a pressure of the coolant does not exceed a predetermined level when the first cooling source is unavailable.